

RAM-DOSS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **REGION 5 CHICAGO REGIONAL LABORATORY** 536 SOUTH CLARK STREET **CHICAGO, ILLINOIS 60605**

	Date:	8/27/2010	
	Subject:	Review of Region 5 Data for R06 Deep Water Grand Isle	
	From:	David Schroeder 0.5. Region 5 Chicago Regional Laboratory	
	То:	Region 6, US EPA 10625 Fallstone Road Houston, TX 77099	
	our current does not p the labora	being transmitted under this cover memo successfully passed CRL nt Quality Management Plan (QMP) and appropriate Standard Opperform data validation which is based on your data quality object atory generating the data. In this report represent only the samples analyzed.	erating Procedures (SOPs). Please be aware that CRI
	Please ha	ve the U.S. EPA Project Manager/Officer call the CRL Sample Co.	pordinator at (312) 353-7444 for any comments or
	Attached	are Results for: R06 Deep Water Grand Isle	
	Data Ma	nagement Coordinator and Date Received	
	Date Tra	nsmitted:/	
Analys	es included in	this report:	

Page 1 of 13 Report Name: 1008046 FINAL Aug 27 10 1058



536 South Clark Street, Chicago, IL 60605 Phone:(312)353-8370 Fax:(312)886-2591

Region 6, US EPA 10625 Fallstone Road Houston TX, 77099 Project: R06 Deep Water Grand Isle Project Number: T0033-100403-20100822-02

Project Manager: Kristie Warr

Reported: Aug-27-10 10:58

ANALYSIS CASE NARRATIVE Analyst: David Schroeder (312) 353-3100

General Information

Twelve subsurface samples were received by the Chicago Regional Laboratory (CRL) and prepared for dioctyl sulfosuccinate (DOSS) analysis on August 25, 2010. The samples were received at or less than 6°C.

Sample Analysis and Results

Analysis of dioctyl sulfosuccinate in water by LC/MS/MS was carried out using CRL Regional Analytical Method for Dioctyl Sulfosuccinate (RAM-DOSS, CAS 577-11-7) in Sea Water by Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). None of the sample results were above the DOSS reporting level (20 ppb) or the Region 5 and Region 6 DOSS identification level of 10 ppb.

DOSS is surface active. The surface activity results in DOSS adhering to many materials. Sampling techniques that expose samples to materials other than the sample container may reduce DOSS concentration in samples. Sampling techniques such as peristaltic pumping expose the sample to large surface areas compared to sample volume. The Chicago Regional Laboratory has found that polyethylene tubing binds DOSS. DOSS association with peristaltic tubing materials likely results in bias low DOSS concentrations.

The 1008047, 1008048, 1008049 and 1008050 supporting data are stored with 1008046.

Quality Control

The DOSS relative percent difference between B1000896-MS2 and B1000896-MSD2 was 40%. The DOSS relative percent difference between B1000896-MS3 and B1000896-MSD3 was 41%. The B1000896-MSD3 DOSS result less than the 50% recovery limit, but the B1000896-MS3 DOSS result was within the recovery limit. All affected results were qualified estimated (J).

The 1008046-02, 1008046-04, 1008049-02 and B100896-MSD3 DOSS-D34 recoveries were below the 50% recovery limit, therefore the DOSS results for these samples were qualified estimated (J).

All quality control criteria not mentioned met acceptance limits stated in the method.

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Project: R06 Deep Water Grand Isle

Project Number: T0033-100403-20100822-02

Project Manager: Kristie Warr

Reported:

Aug-27-10 10:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T008-0058-100822-SW-3.0-1	1008046-01	Water	Aug-22-10 09:20	Aug-25-10 07:45
T008-0057-100822-SW-24-1	1008046-02	Water	Aug-22-10 10:30	Aug-25-10 07:45
T008-0057-100822-SW-13-1	1008046-03	Water	Aug-22-10 10:30	Aug-25-10 07:45
T008-0056-100822-SW-3.0-1	1008046-04	Water	Aug-22-10 12:10	Aug-25-10 07:45

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Region 6, US EPA 10625 Fallstone Road Houston TX, 77099

Project: R06 Deep Water Grand Isle Project Number: T0033-100403-20100822-02

Project Manager: Kristie Warr

Reported: Aug-27-10 10:58

Analysis by LC MS MS

US EPA Region 5 Chicago Regional Laboratory

T008-0058-100822-SW-3.0-1 (1008046-01) Water Sampled: Aug-22-10 09:20 Received: Aug-25-10 07:45

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	U			20.3	ug/L	1	B100896	Aug-25-10	Aug-25-10
						¥			
Surrogate: DOSS-D34	154			87.4 %	50-	150	"	"	,

T008-0057-100822-SW-24-1 (1008046-02) Water Sampled: Aug-22-10 10:30 Received: Aug-25-10 07:45

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	U	J		19.7	ug/L	= 1	B100896	Aug-25-10	Aug-25-1(
Surrogate: DOSS-D34	66.9			39.0 %	50	-150	"	" "	

T008-0057-100822-SW-13-1 (1008046-03) Water Sampled: Aug-22-10 10:30 Received: Aug-25-10 07:45

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	U			19.4	ug/L	1	B100896	Aug-25-10	Aug-25-10
Surrogate: DOSS-D34	117			67.5 %	50	-150	"	" "	

T008-0056-100822-SW-3.0-1 (1008046-04) Water Sampled: Aug-22-10 12:10 Received: Aug-25-10 07:45

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
dioctyl sulfosuccinate	U	J		21.4	ug/L	1	B100896	Aug-25-10	Aug-25-10

David Schroeder, Chemist

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Region 6, US EPA 10625 Fallstone Road Houston TX, 77099 Project: R06 Deep Water Grand Isle

Project Number: T0033-100403-20100822-02 Project Manager: Kristie Warr

Reported: Aug-27-10 10:58

Analysis by LC MS MS

US EPA Region 5 Chicago Regional Laboratory

T008-0056-100822-SW-3.0-1 (1008046-04) Water Sampled: Aug-22-10 12:10 Received: Aug-25-10 07:45

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analy	zed
Surrogate: DOSS-D34	80.0			46.8 %	50	-150	B100896	Aug-25-10	Aug-25-10	

David Schroeder, Chemist

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Project Manager: Kristie Warr

Reported: Aug-27-10 10:58

Analysis by LC MS MS - Quality Control US EPA Region 5 Chicago Regional Laboratory

Batch B100896 - *** DEFAULT PREP ***

Blank (B100896-BLK1)		Prepared & Analyzed: Aug-25-10									
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	U			20.2	ug/L						
Surrogate: DOSS-D34	 256				,	205.1		125	50-150		

LCS (B100896-BS1) Prepared & Analyzed: Aug-25-10

DCD (DX00070 DDX)				_ repare							
χ "		Flags /		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD L	Limit
dioctyl sulfosuccinate	228	=		20.8	ug/L	210.5	210.5	108	50-150		
			3 0								
C DOSS D24	227								50.150	7.77° an to be an	
Surrogate: DOSS-D34	231				"	210.5		110	<i>50-150</i>		

LCS Dup (B100896-BSD1) Prepared & Analyzed: Aug-25-10

		Flags /		Reporting		Spike	e Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
dioctyl sulfosuccinate	207			20.2	ug/L	185.2		112	50-150	9.95	30
Surrogate: DOSS-D34	198			-	"	185.2	atot moor (1) 11 12 13 14 15 15 15 15 15 15 15	107	50-150		



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Reported: Aug-27-10 10:58

Analysis by LC MS MS - Quality Control US EPA Region 5 Chicago Regional Laboratory

Batch B100896 - *** DEFAULT PREP ***

Duplicate (B100896-DUP1)	Source:	Prepared	& Analy	zed: Aug							
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	U			20.4	ug/L		U				200
Surrogate: DOSS-D34	147				,,	173.9		84.7	50-150		-0.70

Duplicate (B100896-DUP2)	 Source: 1008047-01			Prepared & Analyzed: Aug-25-10							
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	U			19.6	ug/L		U				200
Surrogate: DOSS-D34	 87.0	7			"	171.7		50.7	50-150	1100-00-0	

Duplicate (B100896-DUP3) Analyte		Source:	1008048-01		Prepared	l & Analy	zed: Aug	-25-10				
		Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	= =	U	J		18.7	ug/L		U		<u></u>		200
Surrogate: DOSS-D34	= =	108				"	173.9	THE RESIDENCE PROPERTY OF THE PROPERTY AND A STATE OF THE	62.0	50-150		2

Duplicate (B100896-DUP4)

Source: 1008049-01

Prepared & Analyzed: Aug-25-10

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Project Number: T0033-100403-20100822-02

Project Manager: Kristie Warr

Reported: Aug-27-10 10:58

Analysis by LC MS MS - Quality Control US EPA Region 5 Chicago Regional Laboratory

Batch B100896 - *** DEFAULT PREP ***

		Flags /		Reporting	10	Spike	Source		%REC	TOO! III	RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
dioctyl sulfosuccinate	U			19.2	ug/L		U				200
Surrogate: DOSS-D34	143				п	172.4		82.7	50-150		

Duplicate (B100896-DUP5) Analyte	Source:	1008050-03	}	Prepared	& Analy	zed: Aug	-25-10				
	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	U			19.6	ug/L		• U		-14		200
Surrogate: DOSS-D34	159			WEINTH FOR	"	193.2		82.3	50-150		

Matrix Spike (B100896-MS1) Analyte	Source	: 1008046-01		Prepared	& Analy	zed: Aug	-25-10				
	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	145			20.3	ug/L	172.4	U	83.8	50-150	7.4	
Surrogate: DOSS-D34	135				<i>n</i>	172.4		78.0	50-150	-	****

Matrix Spike (B100896-MS2) Source: 1008047-01 Prepared & Analyzed: Aug-25-10



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Project Manager: Kristie Warr

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Analysis by LC MS MS - Quality Control US EPA Region 5 Chicago Regional Laboratory

Batch B100896 - *** DEFAULT PREP ***

Date Divovo												
			Flags /		Reporting		Spike	Source		%REC		RPD
Analyte		Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
dioctyl sulfosuccinate		175	1		19.4	ug/L	172.4	U	101	50-150		I Hell
Surrogate: DOSS-D34		168		(50000000)	9	"	172.4		97.7	50-150		

Matrix Spike (B100896-MS3) Analyte	Source:	1008048-01		Prepare	d & Analy	zed: Aug	-25-10				TATE OF STREET
	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	128	J		18.7	ug/L	173.2	U	74.0	50-150		
Surrogate: DOSS-D34	130				"	173.2		75.0	50-150		

Matrix Spike (B100896-MS4) Analyte	Source:	1008049-01		Prepared	& Analy	zed: Aug	-25-10		2	1 751 4	
	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	119			19.7	ug/L	172.4	U	69.2	50-150		
Surrogate: DOSS-D34	123			variational access	.,	172.4		71.5	50-150		

Matrix Spike (B100896-MS5)

Source: 1008050-03

Prepared & Analyzed: Aug-25-10

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Project Number: T0033-100403-20100822-02 Project Manager: Kristie Warr Reported: Aug-27-10 10:58

Analysis by LC MS MS - Quality Control US EPA Region 5 Chicago Regional Laboratory

Batch B100896 - *** DEFAULT PREP ***

	 										
	1 - 13	Flags /		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
dioctyl sulfosuccinate	149			19.6	ug/L	194.2	U	77.0	50-150	w ulba	
Surrogate: DOSS-D34	150				"	194.2		77.4	50-150		

Matrix Spike Dup (B100896-MSD1)	Source:	1008046-01		Prepared	& Analy	zed: Aug	-25-10		5	A	
Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	138			20.0	ug/L	173.9	U	79.1	50-150	4.92	30
Surrogate: DOSS-D34	132		LEATHING SECTION		"	173.9		75.9	50-150		

Matrix Spike Dup (B100896-MSD2) Analyte	Source:	1008047-01		Prepared	& Analy	zed: Aug	-25-10			/_PLEL =	110230
	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	116			19.7	ug/L	170.9	U	67.8	50-150	40.6	30
Surrogate: DOSS-D34	114				,,	170.9		66.4	50-150		

Matrix Spike Dup (B100896-MSD3)

Source: 1008048-01

Prepared & Analyzed: Aug-25-10



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Project Number: T0033-100403-20100822-02 Project Manager: Kristie Warr

Reported: Aug-27-10 10:58

Analysis by LC MS MS - Quality Control US EPA Region 5 Chicago Regional Laboratory

Batch B100896 - *** DEFAULT PREP ***

DateM D100070	DELINCETTREE	Flags /		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
dioctyl sulfosuccinate	84.4	J		20.0	ug/L	173.2	U	48.7	50-150	41.2	30
Surrogate: DOSS-D34	80.7		W. 201 St 1		,,	173.2		46.6	50-150		

Matrix Spike Dup (B100896-MSD4)	Source	1008049-01		Prepared	& Analy	yzed: Aug	-25-10				
		Flags /		Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qualifiers	MDL	Limit	Units	Level	Result	%REC	Limits	RPD	Limit
dioctyl sulfosuccinate	134			19.7	ug/L	174.7	Ū	76.9	50-150	11.8	30
Surrogate: DOSS-D34	124				,,	174.7		70.9	50-150		

Matrix Spike Dup (B100896-MSD5)	Source: 1008050-03			Prepared & Analyzed: Aug-25-10							
Алаlyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
dioctyl sulfosuccinate	148			19.8	ug/L	190.5	U	77.9	50-150	0.705	30
							ŕ				
Surrogate: DOSS-D34	148	•			"	190.5		77.6	50-150		

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Notes and Definitions

J The identification of the analyte is acceptable; the reported value is an estimate.

U Not Detected

NR Not Reported

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Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception	Exception			
			Default Report (not modified)	11 2.2			
			VERSION 6.05:2003				
	RAM-DOSS	(Water)	Special Units: (ug/L)				
1008046-02	RAM-DOSS	DOSS-D34	Exceeds lower control limit				
1008046-04	RAM-DOSS	DOSS-D34	Exceeds lower control limit				
B100896-MSD2	RAM-DOSS	dioctyl sulfosuccinate	Exceeds RPD control limit				
B100896-MSD3	RAM-DOSS	dioctyl sulfosuccinate	Exceeds lower control limit				
B100896-MSD3	RAM-DOSS	dioctyl sulfosuccinate	Exceeds RPD control limit				
B100896-MSD3	RAM-DOSS	DOSS-D34	Exceeds lower control limit				